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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/217,873 12/21/98 RAPAICH

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EXAMINER

WM02/1010

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ART UNIT

PAPER NUMBER

2614

DATE MAILED:

10/10/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/217,873

Applicant(s)

RAPACH, MARK

Examiner

Paulos M. Natnael

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on July 26, 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 2614

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

2. Claims **1-3,5-8, 10** are **again** rejected under 35 U.S.C. 102(e) as being anticipated by Aleksic et al., U.S. Pat. No. 6,020,921.

Considering claim **1**, Aleksic discloses all claimed subject matter, note;

A) the claimed video source capable of providing a digital YUV video signal is met by Frame buffer 1 and VIDEO IN (FIG 2), which “apply a YUV signal to a gamma correction circuit 3....” (col 2, lines 64-65)

B) the claimed video output capable of connecting to a video display device is met by the output of D/A 9 to the CRT 11 (FIG.2).

C) the claimed digital processor employing a corrective algorithm that applies gamma correction to the digital YUV signal provided by the video source and provides a corrected signal to the video output is met by gamma correction circuit 3 (FIG.2). (See also disclosure of a software-implemented embodiment on col.5, lines 57-67 to col.6, lines 1-35)

Art Unit: 2614

Considering claim 2, the claimed wherein the digital processor further employs a corrective algorithm that corrects at least one of color saturation correction, tint correction, brightness correction and contrast correction is **inherent, because all** personal computers and other types of displays have brightness correction, for example.

Considering claim 3, the claimed software module for user configuration of the digital processor that corrects the digital YUV signal;

Regarding claim 3, see rejection of claim 1(C).

Considering claim 5, the claimed wherein the digital YUV video signal is encoded with a correction factor that is compensated for in applying the corrective algorithm to the digital YUV signal is met by the disclosure "the gamma correction value 0.45, 1/1.8 and 1/1.4". (col. 5, lines 65-66; See also discussion on cols. 3-5)

Considering claim 6, Aleksic discloses all claimed subject matter, note;

a) the claimed process of receiving a YUV digital video signal is met by LIMIT Y 5 (FIG 2), which receives the YUV signal applied by VIDEO IN and FRAME BUFFER 1 that "apply a YUV signal to a gamma correction circuit 3...." (col 2, lines 64-65)

Art Unit: 2614

computationally
b) the claimed process of applying gamma correction to the digital YUV signal within a personal computer is met by the gamma correction circuit 3 (FIG.2). (See also disclosure of an software-implemented embodiment on col.5, lines 57-67 to col.6, lines 1-35)

c) the claimed process of providing a corrected digital YUV signal to an output for connection to a display device is met by the output of gamma correction 3 to conversion circuit 9 (FIG.2).

Considering claim 7, see rejection of claim 2.

Considering claim 8, see rejection of claim 3.

Considering claim 10, see rejection of claim 5.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 9, and 11 are **again** rejected under 35 U.S.C. 103(a) as being unpatentable over Aleksic et al., U.S. Pat. No. 6,020,921.

Art Unit: 2614

Considering claim 4, Aleksic discloses all claimed subject matter, except for;

a) the claimed wherein the video sources comprise multiple sources selected from the group consisting of MPEG, NTSC, CVD, CD.

Regarding a), Aleksic discloses a gamma correction circuit for **multimedia**. Therefore, it would have been obvious to the skilled in the art to readily recognize the teachings of Aleksic, because the multimedia reference includes the claimed sources of video such as the MPEG standard, NTSC, DVD, and CD.

Considering claim 9, see rejection of claim 4.

Considering claim 11, Aleksic et al. disclose the following claimed subject matter, note

B) the claimed video source capable of providing a digital YUV video signal is met by Frame buffer 1 and VIDEO IN (FIG 2), which “apply a YUV signal to a gamma correction circuit 3....” (col 2, lines 64-65)

C) the claimed video output capable of connecting to a video display device is met by the output of D/A 9 to the CRT 11 (FIG.2).

D) the claimed digital processor employing a corrective algorithm that applies gamma correction to the digital YUV signal provided by the video source and provides a corrected signal to the video output is met by gamma correction circuit 3 (FIG.2). (See also disclosure of a software-implemented embodiment on col.5, lines 57-67 to col.6, lines 1-35)

Art Unit: 2614

except for;

A) the claimed personal computer system comprising a processor, a bus, a main memory, a system controller, and graphics controller.

Regarding a), Aleksic et al. does not disclose the listed items. However these items are well known to be inherently present in any personal computer (PC) systems. A PC would not function as a computer without a processor, memory or graphics controller. Therefore, the Examiner is taking Official Notice in that a personal computer system is well known in the art to comprise, inter alia, a processor, a bus, a main memory, a system controller, and graphics controller.

Response to Arguments

5. Applicant's arguments filed on July 26, 2001 have been fully considered but they are not persuasive.

Applicant Arguments

A) The cited reference fails to teach the element of the digital processor employing a corrective algorithm.

B) Applicant respectfully traverses the single reference rejection under 35 U.S.C 103 since not all of the recited elements of the claims are found in Aleksic. Specifically, the digital processor

Art Unit: 2614

employing a corrective algorithm to perform gamma correction is not present in Aleksic, and differs significantly in structure and function from anything that is found in Aleksic as explained above.

Examiner's Response

a) Claim 1 recites a video source capable of providing a digital YUV video signal; a video output capable of connecting to a video display device; and, a digital processor employing a corrective algorithm that applies gamma correction to the digital YUV signal provided by the video source and provides a corrected signal to the video output. Aleksic et al. discloses as the rejection indicates, a video source VIDEO IN and FRAME_BUFFER providing a digital YUV video signal (FIG.2) , a Digital to analog converter D/A connecting to a video display device CRT 11, and a digital processor (Gamma correction 3) employing corrective algorithm (as disclosed in col. 5, lines 57 through col. 6, lines 35). The claim doesn't recite "not utilize a look-up table or switch between straight-line approximations of a gamma correction curve", nor does it specifically claim "computationally apply a corrective algorithm", etc. Aleksic does not use the word algorithm, nevertheless, the corrective function of the digital gamma correction circuit 3 is clearly disclosed in the reference '921. Hence, the Applicant is arguing something that is not in the claims. Argument, therefore, is not considered persuasive.

Art Unit: 2614

B) Firstly, “35 U.S.C. 103 authorizes a rejection where, to meet the claim, it is necessary to modify a single reference or to combine it with one or more other references. (see MPEP 706.02(j)). Secondly, the digital processor is disclosed in Aleksic as **Gamma Correction 3**, whose function and structure is discloses in the reference (see Summary of the invention, col. 1 through col. 2). Besides, as explained above in part A, claim 1 and 6 do not recite specific functions and structures of the digital processor. Therefore, the arguments are unpersuasive.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2614

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Paulos Natnael** whose telephone number is **(703) 305-0019**. The examiner can normally be reached on **Monday through Thursday** from **8:00 a. M. to 5:00 p.m.** The examiner can also be reached on alternate **Fridays**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Reinhard Eisenzopf**, can be reached on **(703) 305-4711**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is **(703) 305-3900**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications intended for entry)

or:

(703) 872-9314 (for informal or draft communications, please label "PROPOSED" OR "DRAFT").

Art Unit: 2614

Hand-delivered responses should be brought to Crystal Park
II, 2121 Crystal Drive, Arlington, V.A. Sixth Floor
(Receptionist).

Paulos M. Natnael

October 04, 2001

Rein J.
REINHARD J. EISENZOPF 10-9-01
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600